

FIG. 1A

ddCAGTC^T_T
GCTGTCCTGGTCCGTCAG^T_T

DM429 GCTGTCCTGGTCCGTCAGTTTCTGACdd
dG = -2.85 dH = -43.5 dS = -131.2 Tm = 58.3

ddCGCAGTGC^T_T
GCTGTCCTGGTCCGCTCACC^T_T

MM166 GCTGTCCTGGTCCGCTCACC GTTTTCGTGACGCCdd
dG = -9.02 dH = -75.1 dS = -213.1 Tm = 79.2

ddCAATAATA^T_T
GCTGTCCTGGTCCGTTATTA^T_T

DM432 GCTGTCCTGGTCCGTTATTTTATTAATAACdd
dG = -2.57 dH = -59.8 dS = -184.4 Tm = 51.1

ddCAATAATG^T_T
GCTGTCCTGGTCCGTTATTA^T_T

DM433 GCTGTCCTGGTCCGTTACTTTTGTAATAACdd
dG = -3.73 dH = -64.0 dS = -194.4 Tm = 56.0

ddCAGTAC^T_T
GCTGTCCTGGTCCGTCATG^T_T

DM430 GCTGTCCTGGTCCGTCATGTTTTCATGACdd
dG = -3.71 dH = -51.4 dS = -153.8 Tm = 61.1

ddCAGTAT^T_T
GCTGTCCTGGTCCGTCATA^T_T

DM431 GCTGTCCTGGTCCGTCATATTTTATGACdd
dG = -2.34 dH = -46.4 dS = -142.2 Tm = 53.2

ddCAATAATATA^T_T
GCTGTCCTGGTCCGTTATTA^T_T

DM434 GCTGTCCTGGTCCGTTATTAATTTTATTAATAACdd
dG = -3.65 dH = -74.2 dS = -227.3 Tm = 53.3

ddCAATAATATG^T_T
GCTGTCCTGGTCCGTTATTA^T_T

DM435 GCTGTCCTGGTCCGTTATTAATTTTGTAATAACdd
dG = -4.81 dH = -78.4 dS = -237.3 Tm = 57.2

GCTGAGCTGC^T_T
5' FAM-TXAGAGTCTGGTGCCGACTCGACGTTTCCGTCGAGTCG

DM436 FAM-TXAGAGTCTGGTGCCGACTCGACGTTTCCGTCGAGTCG

FIG. 1B

MM001 CACGACAGGCAAGACAGAGAXYGCTCACGTTTTCGTGAGCT
MM119 CACACAGAGGACAXXAGCTCACGTTTTCGTGAGCT

$\Delta G^\circ = -9.0$ kcal/mole at 37 °C
 $\Delta H^\circ = -75.1$ kcal/mole
 $\Delta S^\circ = -213.1$ cal/ (°K.mol)
 $T_m = 79.2^\circ\text{C}$ assuming a 2 state model

DM362 GCTGTCTGGTXXGCTCACGTTTTCGTGAGC
DM363 GCTGTCTGGTXXGCTCACGTTTTCGTGAGC
DM364 GCTGTCTGGTXXGCTCACGTTTTCGTGAGC
DM365 GCTGTCTGGTXXGCTCACGTTTTCGTGAGC
DM366 GCTGTCTGGTXXGCTCACGTTTTCGTGAGC

ddCGCAGTGC T
GCTGTCTGGTXXGCTCACGTTTTCGTGAGC
GCTGTCTGGTXXGCTCACGTTTTCGTGAGC

T
CGAGTGC T

$G^\circ = -7.52$ kcal/mole at 37 °C

$H^\circ = -69.0$ kcal/mole

$S^\circ = -198.3$ cal/ (°K.mol)

$T_m = 74.8^\circ\text{C}$ assuming a 2 state model

T
TCGAGTGC T

$G^\circ = -8.00$ kcal/mole at 37 °C

$H^\circ = -65.5$ kcal/mole

$S^\circ = -185.2$ cal/ (°K.mol)

$T_m = 80.2^\circ\text{C}$ assuming a 2 state model

7
CGAGTGC T
5' GCTGTCTGGTXXGCTCACGTTTTCGTGAGC

$G^\circ = -6.9$ kcal/mole at 37 °C

$H^\circ = -63.9$ kcal/mole

$S^\circ = -183.8$ cal/ (°K.mol)

$T_m = 74.5^\circ\text{C}$ assuming a 2 state model

8

GGCAGTGC T
5' GCTGTCTGGTXXGCTCACGTTTTCGTGAGC DM362
5' GCTGTCTGGTXXGCTCACGTTTTCGTGAGC DM363

$G^\circ = -9.0$ kcal/mole at 37 °C

$H^\circ = -74.9$ kcal/mole

$S^\circ = -212.5$ cal/ (°K.mol)

$T_m = 79.4^\circ\text{C}$ assuming a 2 state model

T
Tm
GGCAGTGC T

$G^\circ = -9.3$ kcal/mole at 37 °C

$H^\circ = -79.3$ kcal/mole

$S^\circ = -225.7$ cal/ (°K.mol)

$T_m = 78.2^\circ\text{C}$ assuming a 2 state model

10

GCTGAGCTGC T
5' GCTGTCTGGTXXGCTCACGTTTTCGTGAGC DM364
5' GCTGTCTGGTXXGCTCACGTTTTCGTGAGC DM365

$G^\circ = -11.2$ kcal/mole at 37 °C

$H^\circ = -92.0$ kcal/mole

$S^\circ = -260.5$ cal/ (°K.mol)

$T_m = 80^\circ\text{C}$ assuming a 2 state model

10

CCUGAGCTGC T
5' GCTGTCTGGTXXGCTCACGTTTTCGTGAGC DM366
5' GCTGTCTGGTXXGCTCACGTTTTCGTGAGC DM366

$G^\circ = -10.7$ kcal/mole at 37 °C
 $H^\circ = -89.0$ kcal/mole
 $S^\circ = -252.5$ cal/ (°K.mol)
 $T_m = 79.4^\circ\text{C}$ assuming a 2 state model

FIG. 2

FIG. 2. are duplex decoys

5'	GCTGTCTGGTCCGTTATTATAC-PO4	MM308 (o-methyl)
5'	GCTGTCTGGTCCGTTATTATAC-PO4	MM309
5'	GCTGTCTGGTCCGTTATTATACdd	MM317
5'	GCTGTCTGGTCCGTTATTATAC-Biotin	CL085
3'	ddCCAGGCAATAATATG	MM312 Tm=45°
3'	ddCAGGCAATAATATG	MM311 Tm=40.5°
3'	ddCAATAATATG	MM310 Tm=24.3°
3'	ddCAGGCAATAATATGGTCTGTCTG	SCJ091
3'	ddCCAGGCAATAATATGGTCTGTCTG	MM338
5'	GCTGTYTGGTGXGTTAYTATAC-Biotin	CL077
5'	GCTGTYTGGTGXGTTAYTATAC-PO4	CL062
	ddCYCAATXATATG-5'	CL063
	ddCACYCAATXATATG-5'	CL064/CL078 Tm=50.4
	ddCCACYCAATXATATG-5'	CL065/CL079 Tm=55
5'	GCTGTYTGGTAXGTTAYTATAC-PO4	CL091/CL100
	ddCATYCAATXATATG-5'	CL092/CL101

FIG. 3

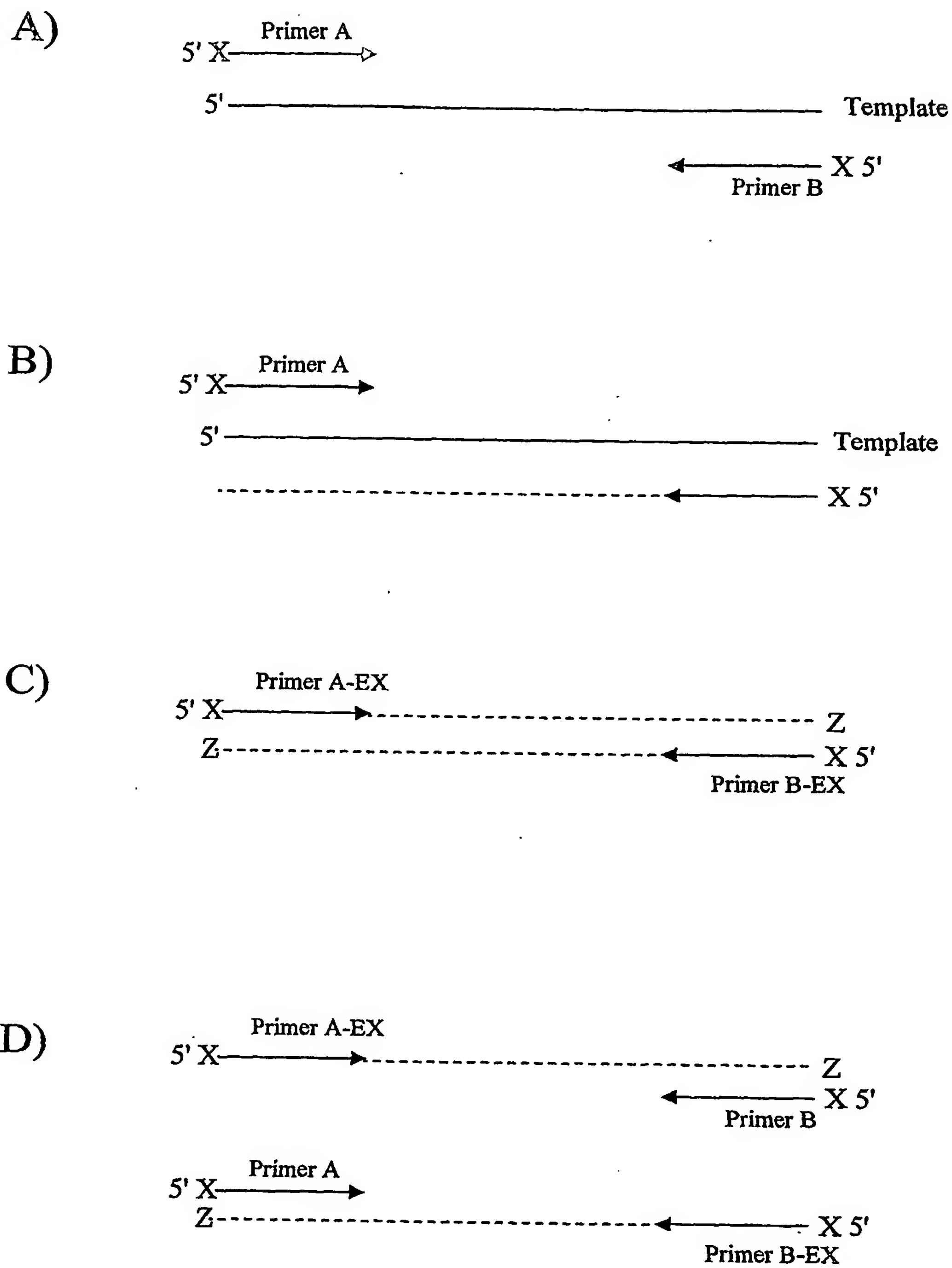


FIG. 4

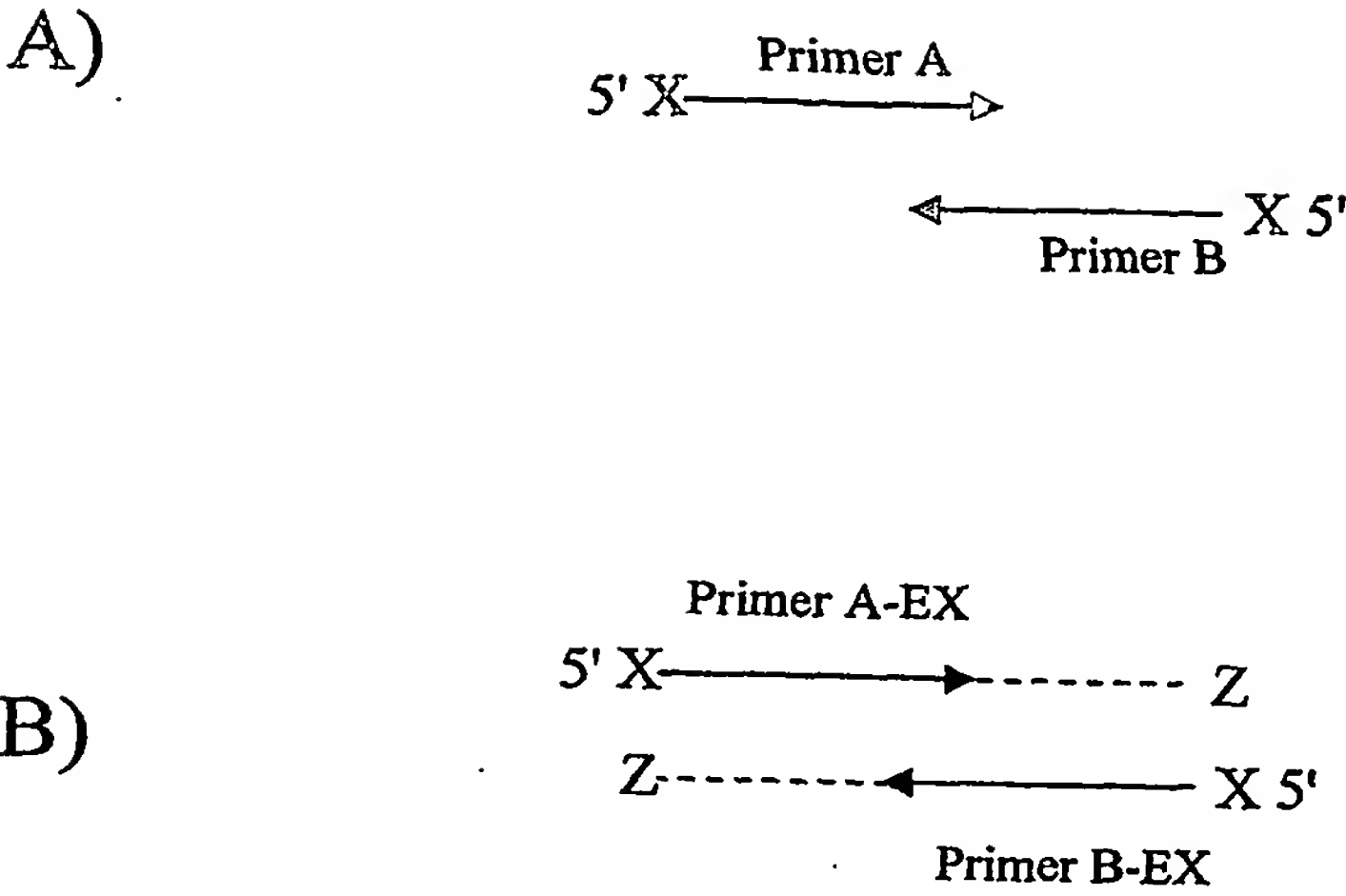
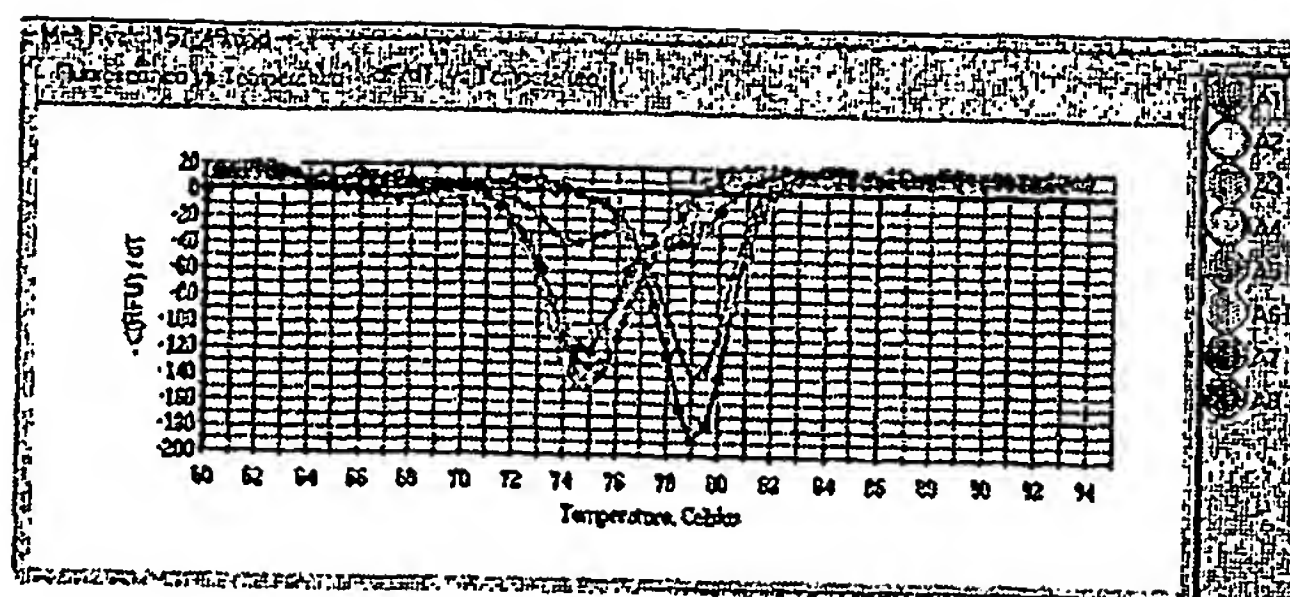
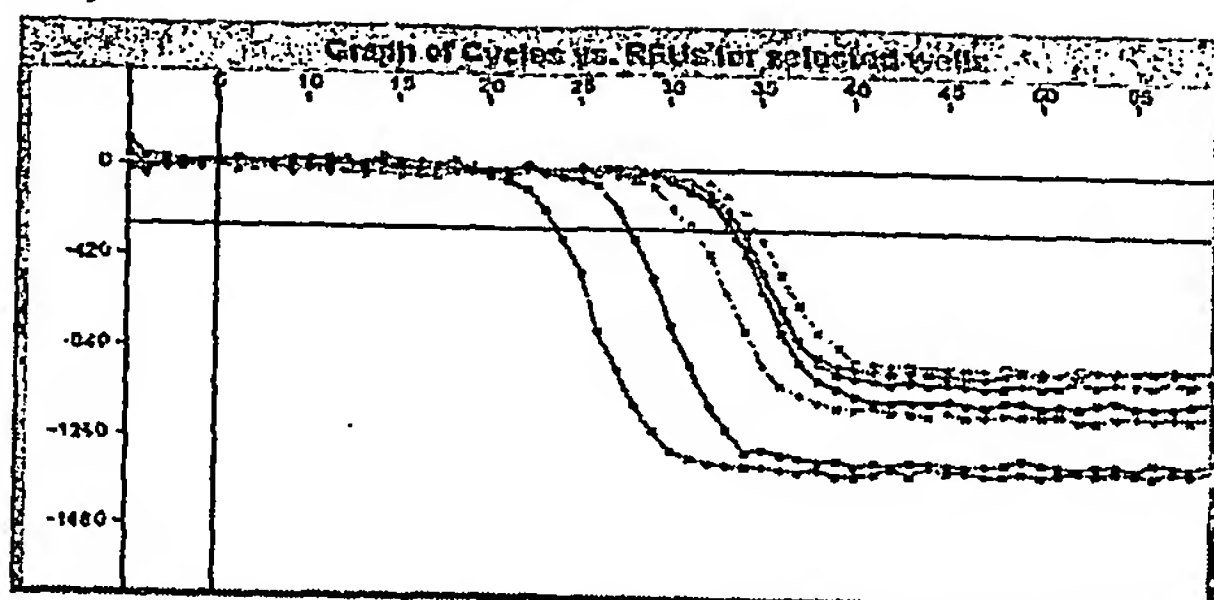
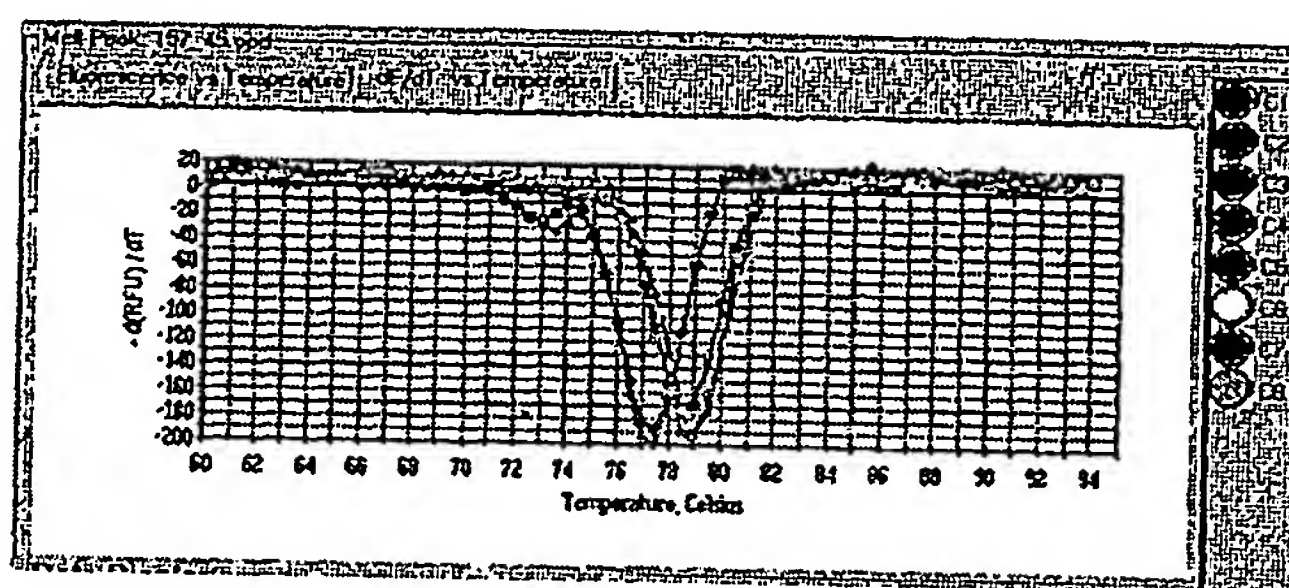
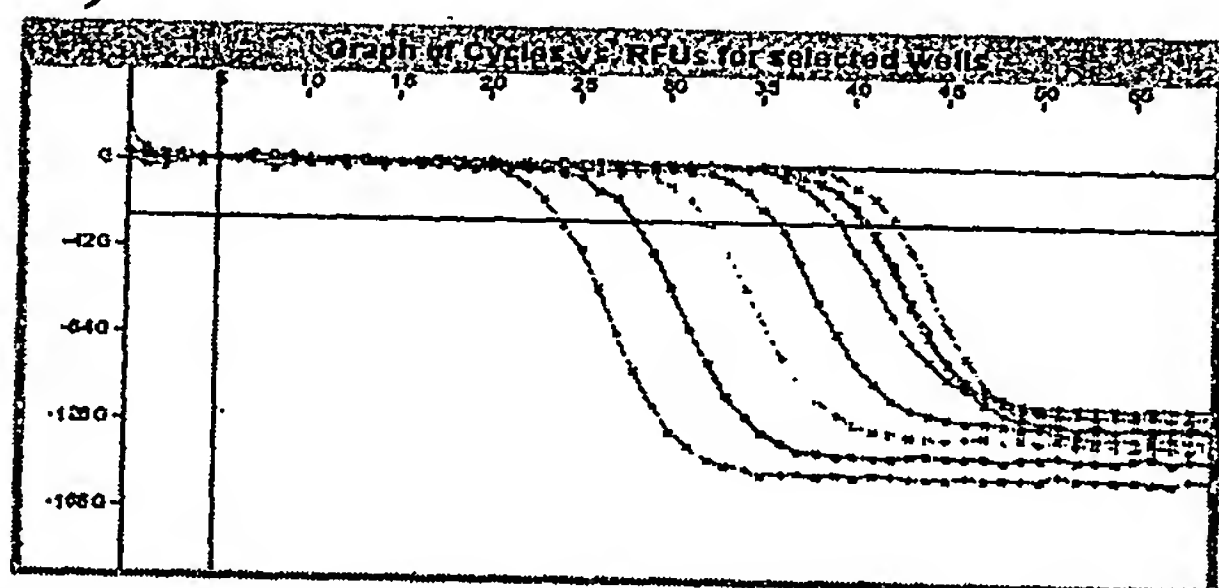


FIG. 5

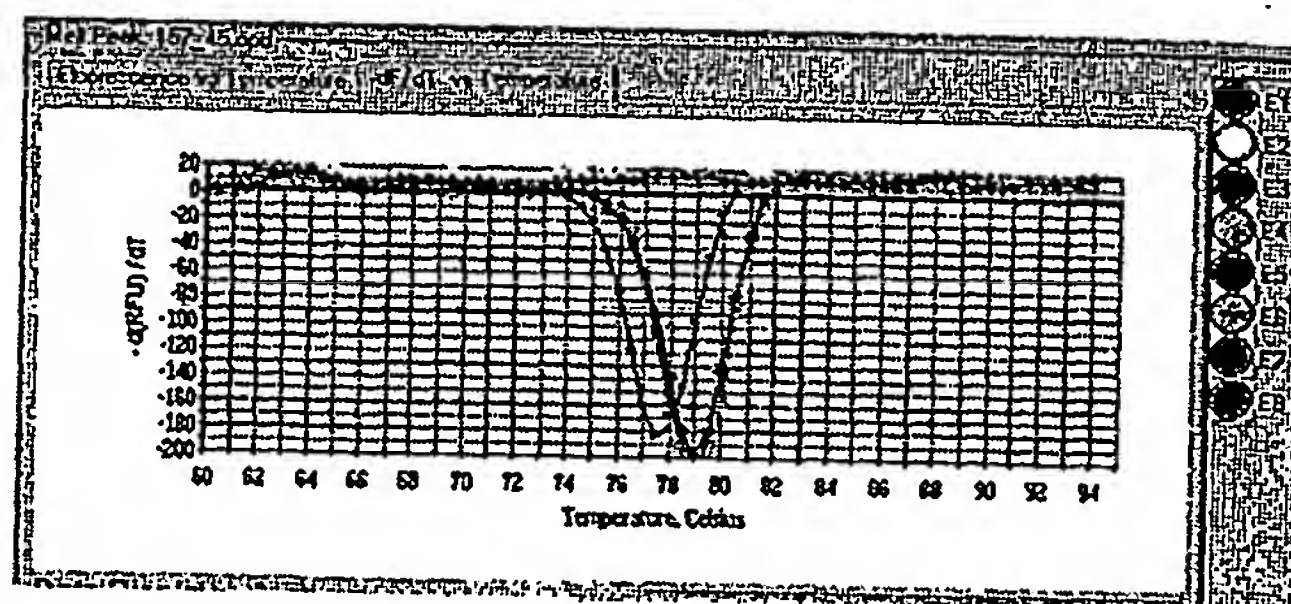
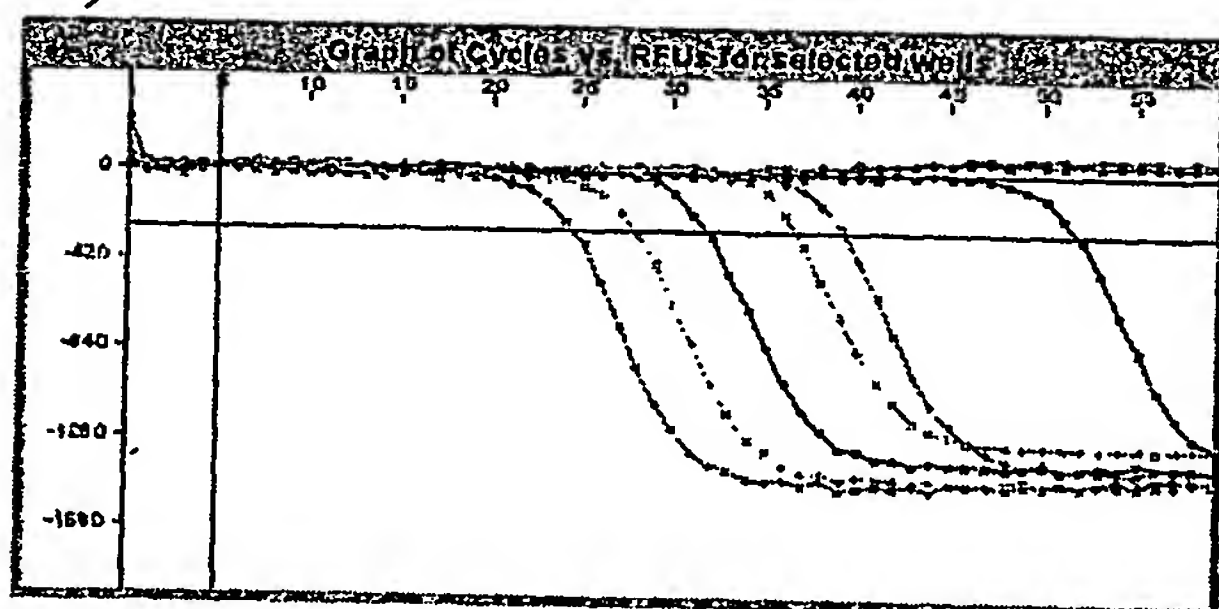
5 A)



5 B)



5 C)



5 D)

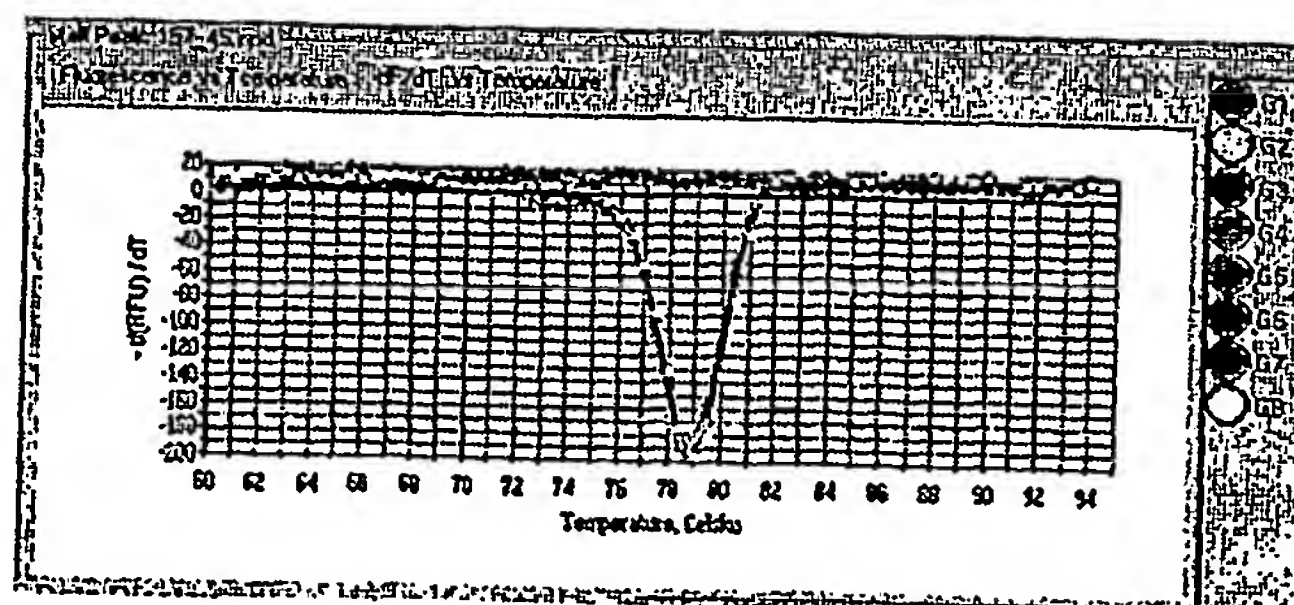
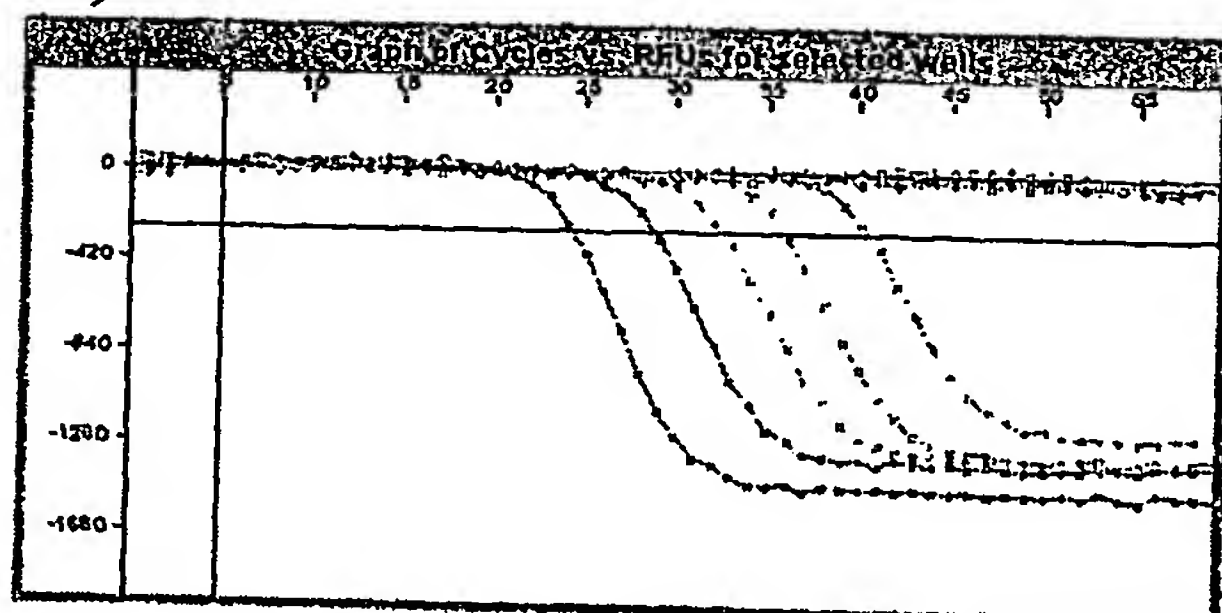


FIG. 6

